



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>7</sup>: C07D 487/04, C07B 61/00, C07D 519/00, A61K 31/5517, G01N 33/50 // (C07D 487/04, 243:00, 209:00) (C07D 519/00, 487:00, 487:00)</p>	A3	<p>(11) International Publication Number: <b>WO 00/12506</b></p> <p>(43) International Publication Date: 9 March 2000 (09.03.00)</p>
<p>(21) International Application Number: PCT/GB99/02836</p> <p>(22) International Filing Date: 27 August 1999 (27.08.99)</p> <p>(30) Priority Data: 9818730.5 27 August 1998 (27.08.98) GB</p> <p>(71) Applicant (for all designated States except US): THE UNIVERSITY OF PORTSMOUTH HIGHER EDUCATION CORPORATION [GB/GB]; University House, Winston Churchill Avenue, Portsmouth PO1 2UP (GB).</p> <p>(72) Inventors; and (75) Inventors/Applicants (for US only): THURSTON, David, Edwin [GB/GB]; University of Portsmouth, St Michael's Building, White Swan Road, Portsmouth, Hampshire PO1 2UP (GB). HOWARD, Philip, Wilson [GB/GB]; University of Portsmouth, St Michael's Building, White Swan Road, Portsmouth, Hampshire PO1 2DT (GB).</p> <p>(74) Agents: WATSON, Robert, J. et al.; Mewburn Ellis, York House, 23 Kingsway, London WC2B 6HP (GB).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p> <p>(88) Date of publication of the international search report: 29 June 2000 (29.06.00)</p>
<p>(54) Title: COLLECTIONS OF COMPOUNDS</p> <div style="text-align: center; margin: 20px 0;"> <p>(IV)</p> </div> <p>(57) Abstract</p> <p>A compound of formula (IV): O is a solid support; L is a linking group or a single bond; X' is selected from CO, NH, S, or O; A is O, S, NH, or a single bond; R<sub>2</sub> and R<sub>3</sub> are independently selected from: H, R, OH, OR, =O, =CH-R, =CH<sub>2</sub>, CH<sub>2</sub>-CO<sub>2</sub>R, CH<sub>2</sub>-CO<sub>2</sub>H, CH<sub>2</sub>-SO<sub>2</sub>R, O-SO<sub>2</sub>R, CO<sub>2</sub>R, COR, CN and there is optionally a double bond between C1 and C2 or C2 and C3; R<sub>6</sub>, R<sub>7</sub>, and R<sub>9</sub> are independently selected from H, R, OH, OR, halo, nitro, amino, Me<sub>3</sub>Sn; R<sub>11</sub> is either H or R; Q is S, O or NH; R<sub>10</sub> is a nitrogen protecting group; and Y is a divalent group such that HY = R, and other related compounds and collections of compounds.</p>		

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# INTERNATIONAL SEARCH REPORT

national Application No

PCT/GB 99/02836

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C07D487/04 C07B61/00 C07D519/00 A61K31/5517 G01N33/50  
 //(C07D487/04,243:00,209:00),(C07D519/00,487:00,487:00)

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07D A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	D.E, THURSTON ET AL.: "Synthesis of a novel GC-specific covalent-binding DNA affinity-cleavage agent based on pyrrolobenzodiazepines" CHEMICAL COMMUNICATIONS., 1996, pages 563-565, XP002135907 ROYAL SOCIETY OF CHEMISTRY., GB ISSN: 1359-7345 scheme 1	13
A	WO 97 01560 A (PHARMACOPEIA INC) 16 January 1997 (1997-01-16) claim 1	13

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentaan 2  
 NL - 2280 HV Rijswijk  
 Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
 Fax: (+31-70) 340-3016

Authorized officer

Alfaro Faus, I

# INTERNATIONAL SEARCH REPORT

national Application No

PCT/GB 99/02836

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CHEMICAL ABSTRACTS, vol. 125, no. 23, 1996 Columbus, Ohio, US; abstract no. 300965y, B. YINGZHI ET AL: "Building blocks for peptide and carbamate libraries" page 1013; XP002135908 abstract & BIOORG. MED. CHEM. LETT. , vol. 6, no. 19, 1996, pages 2299-2300, -----	13
P,X	BARALDI P G ET AL: "Design, synthesis and biological activity of a pyrrolo '2,1-c!'1,4!benzodiazepine (PBD)-distamycin hybrid" BIOORGANIC & MEDICINAL CHEMISTRY LETTERS,GB,OXFORD, vol. 8, no. 21, 3 November 1998 (1998-11-03), pages 3019-3024, XP004141867 ISSN: 0960-894X compound 10 -----	1

# INTERNATIONAL SEARCH REPORT

Information on patent family members

national Application No

PCT/GB 99/02836

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9701560 A	16-01-1997	AU 5831898 A	21-05-1998
		AU 6402096 A	30-01-1997
		CA 2225914 A	16-01-1997
		EP 0850238 A	01-07-1998
		JP 11508563 T	27-07-1999
		US 5962337 A	05-10-1999
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